In the Specification:

Please amended paragraph [0002] as follows:

[0002] In the production of masks for the ~~production~~ manufacturing of semiconductor components, stored design data [[are]] is converted, for example, [[e.g.]] by means of an electron beam method into a structure on a substrate (e.g. chrome-on-glass). The patterning is followed by a measurement of the patterned mask, during which the patterning errors~~, in particular,~~ are determined. Errors may occur in this case in particular in the case of the CD ~~dimension~~ of the mask (CD=critical dimension). The CD ~~dimension~~ specifies the feature size that can be produced during chip making. The mask may also have ~~solely or else additionally~~ a positional error of the structure, ~~which~~ that is likewise measured.

Please amended paragraph [0004] as follows:

[0004] If the errors of a patterned mask are to be measured, then it is important for the errors, in particular of the CD ~~dimension~~, to be determined independently of the positioning in the image field of the measuring unit.

Please amended paragraph [0006] as follows:

[0006] Correction data determined on chrome-on-glass [[are]] is used in the production of the masks for the shorter wavelengths (e.g. 248 nm MoSi or 193 nm MoSi). Adopting these correction data values for the phase shift masks is disadvantageous in this case, since the physical conditions of the mask structures and of the mask substrates are different.

Please amended paragraph [0007] as follows:

[0007] The present invention ~~is~~ provides a method for correcting imaging errors by means of which phase shift masks can also be correctly exposed.

Please amended paragraph [0008] as follows:

[0008] In accordance with an embodiment of the present invention, the method proceeds in the following steps:

a) at least one parameter for the characterization of the mask is detected by a means designed for this purpose,

b) a stored correction data record is selected~~, in particular~~ automatically, from a correction database in a manner dependent on at least one parameter for the characterization of the mask, then

c) optical measurable properties of the mask, in particular of a structure of the mask, being determined by means of a measuring system,

d) the measurement results of the optical properties being combined with the correction data record associated with the mask in a data processing device, and subsequently

e) a measurement data record with the corrected measurement result being stored in a database system.

Please amended paragraph [0009] as follows:

[0009] It is ~~thus~~ therefore possible to employ precisely the correction data record which is specifically matched to the mask material respectively selected. This avoids the situation, for

example, [[e.g.]] in which the correction data record for chrome-on-glass masks is also used for phase shift masks.

Please amended paragraph [0010] as follows:

[0010] In this case, it is advantageous if the wavelength ~~at which~~ of the mask that is used in a photolithography method is also used as the parameter for the characterization of the mask. A substance property of the mask could also advantageously be used as the parameter for the characterization of the mask. Both parameters by themselves or else together are suitable for distinguishing masks.

Please amended paragraph [0015] as follows:

[0015] In this case, a means serves for detecting at least one parameter for the characterization of the mask. A correction database has at least one stored correction data record, a data processing means serving for selecting the correction data, in particular automatically selecting, a correction data record from the correction database in a manner dependent on at least one parameter for the characterization of the mask. A measuring system serves for determining optically measurable properties of the mask, and a combination means serves for combining the measurement results of the optical properties of the mask with the correction data record associated with the mask. The device also has a means for generating a measurement data record, so that the corrected measurement result can be stored in a database system.

Please amended paragraph [0016] as follows:

[0016] The device can be used in particular for the measurement of CD ~~dimensions~~ and/or positional errors of a CoG mask or of a phase shift mask. The device can also be used for masks for use at wavelengths of 365 nm, 248 nm, 193 nm or 157 nm.

Please amended paragraph [0020] as follows:

[0020] FIG. 1 diagrammatically illustrates the elements which are necessary for carrying out embodiments of the method according to the invention. In this case, a mask 1 to be measured is illustrated diagrammatically on the right, the said mask having been patterned in a manner known ~~per se~~ in the art.

Please amended paragraph [0021] as follows:

[0021] The object is to detect the CD ~~dimensions~~ and/or the positional errors of this patterned mask.

Please amended paragraph [0025] as follows:

[0025] The correction data record 21 contains e.g. a shading correction, which compensates for inhomogeneities of an illumination and CCD camera system. This correction is employed during the processing of intensity profiles for a defined measurement field. The correction data record 21 contains tables [[in]] which ~~are stored~~ respectively store different correction values for the x and y directions. As an alternative, stored functions matched to inhomogeneities once the latter have been measured are also possible. The correction data record 21 also contains data which can compensate for lens aberrations.

Please amended paragraph [0027] as follows:

[0027] A measuring system 30 subsequently determines optical properties of the masks 1 by determining CD ~~dimensions~~ and/or positional errors.

Please amended paragraph [0028] as follows:

[0028] In a data processing device 40, the data obtained from the measurement ~~result~~ results are combined with the correction data record 21, i.e. the corrections are applied to the measured values determined.

Please amended paragraph [0030] as follows:

[0030] The area of use of the invention can be seen from FIG. 2, which represents grey-scale value curves for three different mask types in the rows, namely CoG, I-line MoSi and DUV MoSi. The columns respectively represent four different structures on a mask which are to be measured. It can clearly be seen that the grey-scale value curves differ greatly between the mask types. In particular, the I-line MoSi and the DUV MoSi mask have grey-scale value curves which have significantly greater overshoots. This shows that the imaging ~~behaviour~~ behavior of the mask types differ ~~differs~~, so that it is important to use the respectively appropriate correction data ~~record.~~ records.

Please amended paragraph [0031] as follows:

[0031] The embodiment of the invention is not restricted to the preferred exemplary embodiments specified above. Rather, a number of variants are conceivable which make use of

the method according to the invention also in the case of embodiments of fundamentally different ~~configuration.~~ configurations.